

Appln. Ser. No. 10/812,124
Amdt. Dated August 3, 2009
Reply to Office Action dated February 3, 2009

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The following listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently Amended) A telecommunications network for providing fast handoff services to mobile users, said network comprising:

a first information gateway associated with a first mobile coverage area, said first information gateway including first storage means for storing a list of available IP addresses in said first mobile coverage area;

a second information gateway associated with a second mobile coverage area, said second mobile coverage area neighboring said first mobile coverage area, said second information gateway including second storage means for storing a list of available IP addresses in said second mobile coverage area;

a first communication means for said first information gateway and said second information gateway to communicate;

a mobile user unit having GPS means to identify the geographic location of said mobile user unit;

a second communication means for said mobile user unit to communicate with said first information gateway or said second information gateway;

means for establishing communication between said mobile user unit and said first information gateway via said second communication means and providing the geographic location of said mobile user unit to said first information gateway;

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whereby prior to said mobile user unit moving out of said first mobile coverage area into said second mobile coverage area, said first information gateway predicts said second information gateway in accordance with said geographic location of said mobile user unit, communication is established between said first information gateway and said second information gateway via said first communication means for sending at least one available IP address stored in said second storage means of said second information gateway to said first information gateway and sending said available IP address to said mobile user unit; and means for configuring said mobile user unit to use said available IP address upon entering said second mobile coverage area.

2. (Original) A telecommunications network according to claim 1, further including address conflict resolution means associated with each of said first information gateway and said second information gateway.
3. (Original) A telecommunications network according to claim 2, wherein said address conflict resolution means comprises an ARP mechanism.
4. (Original) A telecommunications network according to claim 3, wherein said ARP mechanism is selected from the group consisting of proxy ARP, inverse ARP, reverse ARP and DHCP ARP.

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5. (Original) A telecommunications network according to claim 1, wherein said first storage means and second storage means consist of a database.

6. (Original) A telecommunications network according to claim 1, wherein said first mobile coverage area is a WLAN network, a LAN network, an IPv4 network or an IPv6 network.

7. (Original) A telecommunications network according to claim 1, wherein said second mobile coverage area is a WLAN network, a LAN network, an IPv4 network or an IPv6 network.

8. (Currently Amended) A method for reducing handoff delay to a mobile user moving from a first mobile coverage area to a second mobile coverage area, said method comprising:

establishing a telecommunications network for providing fast handoff services to mobile users comprising;

a first information gateway associated with said first mobile coverage area said first information gateway including first storage means for storing a list of available IP addresses in said first mobile coverage area;

a second information gateway associated with said second mobile coverage area, said second mobile coverage area neighboring said first mobile coverage area, said second information gateway including second storage means for storing a list of available IP addresses in said second mobile coverage area;

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a first communication means for said first information gateway and said second information gateway to communicate;

a mobile user unit having GPS means to identify the geographic location of said mobile user unit; and

a second communication means for said mobile user unit to communicate with said first information gateway or said second information gateway;

establishing communication between said mobile user unit and said first information gateway via said second communication means;

providing said geographic location of said mobile user unit to said first information gateway;

prior to said mobile user unit moving out of said first mobile coverage area into said second mobile coverage area;

predicting said second information gateway using said first information gateway in accordance with the geographic location;

establishing communication between said first information gateway and said second information gateway via said first communication means;

sending at least one available IP address stored in said second storage means of said second information gateway to said first information gateway; and

sending said available IP address to said mobile user unit; and

configuring said mobile user unit to use said available IP address upon entering said second mobile coverage area.

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9. (Original) A method according to claim 8, further including the step of dynamically updating said lists of available IP addresses on said first storage means and said second storage means.
10. (Original) A method according to claim 8, wherein said step of establishing communication between said mobile user unit and said first information is performed upon boot up of said mobile user unit.
11. (Currently Amended) A method of storing a list of available IP addresses in a mobile coverage area, said method comprising:
- providing an information gateway associated with said mobile coverage area said information gateway including means for gathering IP address information from users of non-mobile devices, and storage means for storing a list of available IP addresses in said mobile coverage area in accordance with said gathered information; and
- dynamically updating said list of available IP addresses.
12. (Original) A method according to claim 11, wherein said step of dynamically updating comprises performing an address conflict resolution process on said available IP addresses.
13. (Original) A telecommunications network according to claim 12, wherein said address conflict resolution process comprises an ARP mechanism.

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14. (Original) A telecommunications network according to claim 13, wherein said ARP mechanism is selected from the group consisting of proxy ARP, inverse ARP, reverse ARP and DHCP ARP.